Department of Energy
Ohio Field Office
West Valley Demonstration Project
10282 Rock Springs Road
West Valley, NY 14171-9799

DW:2000:0852

November 17, 2000

Mr. Robert R. Campbell, President
West Valley Nuclear Services Company
10282 Rock Springs Road
West Valley, NY 14171-9799

ATTENTION: J. R. Gerber, Environmental Affairs Manager, AOC-24

SUBJECT: Environmental Checklist OH-WVDP-2000-05, "Decontamination Activities for the Main Plant Building"

REFERENCE: WD:2000:0829 (74734), J. R. Gerber to A. C. Williams, "Environmental Checklist OH-WVDP-2000-05, 'Decontamination Activities for the Main Plant'" dated November 2, 2000

Dear Sir:

The Ohio Field Office West Valley Demonstration Project National Environmental Policy Act (NEPA) Compliance Officer has reviewed the subject environmental checklist and determined that the action described therein is categorically excluded from the requirement to prepare additional NEPA documentation in the form of either an Environmental Assessment or Environmental Impact Statement.

Enclosed is a signed Environmental Checklist/Action Description Memorandum Form and attachment to the Environmental Checklist.

Sincerely,

Daniel W. Sullivan
NEPA Compliance Officer

Enclosure: Environmental Checklist/Action Description Memorandum Form and Attachment

cc: H. R. Moore, OH/WVDP, WV-DOE, w/enc.
J. L. Drake, OH/WVDP, WV-DOE, w/o enc.

DWS:0104 - 74790 - 451.7

DWS/sdm

Department of Energy (DOE)
Ohio Field Office, West Valley Demonstration Project (OH/WVDP)

ENVIRONMENTAL CHECKLIST

Project/Activity Title: Decontamination Activities for Main Plant Building	**NEPA ID Number:** OH-WVDP-2000-05 **Rev. #:** 0 **Date:**
Contractor Project Manager: S. A. Giles	**Phone Number:** (716) 942-2382
Contractor NEPA Coordinator: C. B. Banzer	**Phone Number:** (716) 942-4109
OH/WVDP NEPA Document Manager: D. W. Sullivan	**Phone Number:** (716) 942-4016

A. BRIEF PROJECT/ACTIVITY DESCRIPTION: Attach a detailed description or statement of work.

B. SOURCES OF IMPACT: Would the action involve, generate, or result in changes to any of the following?

	YES	NO		YES	NO
1. Air Emissions	X		12. Water Use/Diversion	X	
2. Liquid Effluents	X		13. Water Treatment	X	
3. Solid Waste		X	14. Water Course Modification		X
4. Radioactive Waste/Soil	X		15. Radiation/Toxic Chemical Exposures	X	
5. Hazardous Waste	X		16. Pesticide/Herbicide Use		X
6. Mixed Waste	X		17. High Energy Source/Explosives		X
7. Chemical Storage/Use	X		18. Transportation	X	
8. Petroleum Storage/Use		X	19. Noise Level		X
9. Asbestos	X		20. Workforce Adjustment		X
10. Utilities	X		21. Other		X
11. Clearing or Excavation		X			

In an attachment, qualify and explain each question that you have specifically answered "YES."

C. CATEGORY EVALUATION CRITERIA: Would the proposed action:

	YES	NO
1. Take place in an area of previous or ongoing disturbance?	X	
2. Create hazardous, radioactive or mixed waste for which no disposal is available?	X	
3. Impact a RCRA-regulated unit or facility?	X	
4. Force a low income or ethnic minority population to shoulder a disproportionate share of the negative environmental impacts of pollution or environmental hazards because of a lack of political or economic strength?		X
5. Involve air emissions and be located in an air pollutant non-attainment or maintenance area for any criteria pollutants?		X
6. Threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, including DOE and/or Executive Orders? (i.e., require any federal, state or local permits, approvals, etc.)?	X	
7. Disturb hazardous substances, pollutants or contaminants that pre-exist in the environment such that there would be uncontrolled or unpermitted releases?		X
8. Require siting, construction, or major expansion of a waste storage, disposal, recovery, or treatment facilities, but may include such categorically-excluded facilities?		X
9. Adversely affect environmentally sensitive resources including, but not limited to: structures of archeological, historic or architectural significance; threatened or endangered species or their habitat; floodplains or wetlands; wildlife refuges, agricultural lands or vital water resources (e.g., sole-source aquifers)?		X
10. Involve extraordinary circumstances? As specified at 10 CFR § 1021.410(b)(2), extraordinary circumstances are unique situations presented by specific proposed actions, such as scientific controversy about the environmental effects of the action, uncertain effects or effects involving unique or unknown risks, or unresolved conflicts concerning alternate uses of available resources within the meaning of Section 102(2)(E) of NEPA (42 U.S.C. 4332(2)).		X
11. Be "connected" to other actions with potentially significant impacts, related to other proposed actions with cumulatively significant impacts, and precluded by 40 CFR § 1506.1 or 10 CFR § 1021.211?		X

In an attachment, qualify and explain each question that you have specifically answered "YES."

U.S. Department of Energy (DOE)
Ohio Field Office, West Valley Demonstration Project (OH/WVDP)

ENVIRONMENTAL CHECKLIST

D. RECOMMENDATION AND DETERMINATION

DOE OH/WVDP Director's Recommendation: I find and recommend that this proposed action meets the criteria specified in 10 CFR § 1021, Subpart D, and/or DOE Policy and Guidance for the following:

[✓] Categorical Exclusions (Appendix B, Class of Action B 6.1)
[ ] Actions Within the Scope of Existing NEPA Documentation
(NEPA Document ID Number_____)
[ ] *On-going Operations* (Standard Operating Procedure OH-6.1.01, Rev. 1, Section 5.2)

Signature: Alice C. Williams Date 11/17/2000
Director, Ohio Field Office,
West Valley Demonstration Project (OH/WVDP),
Department of Energy

DOE OH/WVDP NEPA Compliance Officer's Determination: Based on my review of the attached information concerning this proposed action, as the OH/WVDP NEPA Compliance Officer (DOE Order 451.1A, Section 5.d.), I have determined that the proposed action fits within the specified class of actions, that the other regulatory requirements identified in Section C are met, and that this proposed action proceed without further NEPA review.

Signature: Daniel W. Sullivan Date Nov. 7, 2000
OH/WVDP NEPA Compliance Officer,
West Valley Demonstration Project

OR

[ ] Environmental Assessments (Appendix C, Class of Action _____; or Action not listed in Subpart D)
[ ] Environmental Impact Statements (Appendix D, Class of Action _____)
[ ] Interim Actions (40 CFR § 1506.1 and 10 CFR § 1021.211)
[ ] Integrated Documentation for CERCLA/RCRA Actions
[ ] Variances (Emergency Action, 40 CFR § 1506.11 and 10 CFR § 1021.34)

DOE-OH NEPA Compliance Officer's Concurrence: I concur with the recommendation that this proposed action fits within the specified class of actions.

Signature: _____ Date _____
NEPA Compliance Officer,
Ohio Field Office,
Department of Energy

DOE-OH Manager's Determination: Based on my review of the attached information concerning this proposed action, as the Head of the Ohio Field Office (DOE Order 451.1A, Section 5.a.), I have determined that the level of documentation recommended for the proposed action is appropriate.

Signature: _____ Date _____
Manager, Ohio Field Office,
Department of Energy

LIST OF ACRONYMS

ALARA	As Low As Reasonably Achievable
ARC	Acid Recovery Cell
ARPR	Acid Recovery Pump Room
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CPC	Chemical Process Cell
CUP	Cask Unloading Pool
CX	Categorical Exclusion
D&D	Decontamination and Decommissioning
DEIS	Draft Environmental Impact Statement
DOE	Department of Energy
DOT	Department of Transportation
EDR	Equipment Decontamination Room
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FRS	Fuel Receiving and Storage
GTCC	Greater Than Class C
HAC	Hot Acid Cell
HEPA	High Efficiency Particulate (Filter)
HLW	High-Level Waste
LLW	Low-Level Waste
LLWTF	Low-Level Waste Treatment Facility
LLW2	Low-Level Waste Treatment Facility (new)
LWA	Lower Warm Aisle
LWC	Liquid Waste Cell
LWTS	Liquid Waste Treatment Facility
MSM	Master Slave Manipulator
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFS	Nuclear Fuel Services
NYCRR	New York Code of Rules and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOL	New York State Department of Labor
OGA	Off-Gas Aisle
OCG	Off-Gas Cell
PCR	Process Chemical Room
PHA	Product Handling Area
PPC	Product Purification Cell
PPH	Product Packaging and Handling
PPS	Product Packaging and Shipping
PMC	Process Mechanical Cell
PSC	Product Sample Cell
PVU	Portable Ventilation Unit
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
SOP	Standard Operating Procedure
SPDES	State Pollutant Discharge Elimination System
SWMU	Solid Waste Management Unit
TRU	Transuranic Waste
ULO	Uranium Loadout
UPC	Uranium Product Cell
UWA	Upper Warm Aisle
VEC	Ventilation Exhaust Cell

VWR	Ventilation Wash Room
WIPP	Waste Isolation Pilot Plant
WNYNSC	Western New York Nuclear Services Center
WRPA	Waste Reduction and Packaging Area
WVDP	West Valley Demonstration Project
WVNS	West Valley Nuclear Services
XC	Extraction Cell

Attachment to Environmental Checklist OH-WVDP-2000-05
Decontamination Activities for the Main Plant Building

SECTION A. PROJECT/ACTIVITY DESCRIPTION

1.0 BACKGROUND

The West Valley Demonstration Project (WVDP) Act [Public Law 96-368] (the "Act") authorized the United States Department of Energy (DOE) to carry out a high-level liquid nuclear waste management demonstration project at the Western New York Nuclear Service Center (WNYNSC) in West Valley, New York. The Act, among other things, requires DOE to develop a waste form to solidify high-level waste (HLW) that is suitable for transportation and disposal. It also requires the DOE to decontaminate and decommission (D & D) tanks and other facilities at the WNYNSC in which HLW was stored, as well as all WVDP facilities, material, and hardware used in supporting and carrying out the Act.

Among the facilities used by DOE during solidification operations is the Main Plant Building (i.e., the former Nuclear Fuel Services (NFS) Processing Building). The Main Plant Building was designed to recover uranium and plutonium from spent nuclear fuel from 1966 to 1971 during the NFS reprocessing operations. The physical and chemical reprocessing operations were conducted in specially designed cells, rooms, aisles, and glove boxes. Some decontamination work was done in the Main Plant Building during the 1970s as part of planned maintenance, modification, or expansion. From 1982 to 1987, the WVDP performed decontamination operations in several cells and rooms to prepare them for use in the HLW interim storage or as part of the Liquid Waste Treatment System (LWTS).

The NEPA analysis for the early decontamination activities conducted in the Main Plant Building was documented by the *Final Environmental Impact Statement for the Long Term-Management of Liquid High-Level Radioactive Wastes Stored at the Western New York Nuclear Service Center, West Valley* (DOE/EIS-0081, i.e.," the '82 EIS"). The '82 EIS also provided that "eventually all the facilities used for the solidification project would be decontaminated and dismantled–including the main building used in the solidification process..."(DOE/EIS-0081, section 2.1, pg 2-6). The '82 EIS further assumed a schedule for purposes of analysis of alternatives, that most of the decontamination effort would occur in two periods: a) the initial period to decontaminate facilities used for the solidification and temporary storage operations; and b) the final decontamination and decommissioning of the facilities used. The '82 EIS also recognized that although only a few cells used in the fuel reprocessing would be actually used, it would "be advantageous to remove the equipment from the other cells and perform some decontamination since this would advance the goal of final plant decommissioning" ('82 EIS, Section B.3.1, pg. B-53).

Future decontamination and decommissioning of the Main Plant Building and other WVDP facilities are currently the subject of Draft Environmental Impact Statement (DEIS) (DOE/EIS-0226-D). DOE now plans to de-scope the DEIS, and to separate decontamination and waste management decisions from decommissioning and environmental restorations decisions. These decisions will become the subjects of two separate environmental impact statements. Separating the decontamination and waste management decisions will allow the DOE to continue toward the completion of the WVDP while decommissioning and environmental restoration decisions undergo a longer-term NEPA analysis. The de-scoped EIS has not yet been drafted. In the meantime, DOE needs to move forward with completion of the WVDP Act and begin the transition from HLW solidification activities toward decontamination activities while fulfilling its obligations under the WVDP Act.

In preparation for those decontamination activities yet to be analyzed in the de-scoped EIS, to reduce radiological risks for longer term decontamination activities, and to set the stage for final decommissioning, this checklist provides the NEPA regulatory analysis to begin decontamination work for final decommissioning and completion of the Act.

2.0 TYPE AND SCOPE OF ACTIVITY

Scopes of Work

The proposed action evaluated in this checklist is the decontamination of a select set of rooms, cells and areas in the Main Plant Building. In addition to actual decontamination, on-going, supporting activities would include waste characterization and associated waste management activities (e.g. size reduction, packaging, etc). Limited survey and characterization data are available for long range engineering planning and design. Worst case assumptions can be made to plan entries in order to commence initial clean-up and complete the collection of additional samples for the characterization and classification of waste. For long-range planning, though, the scope of this checklist also includes on-going sampling, in other areas of the Main Plant Building, as necessary, for waste characterization and classification.

The cells, rooms, and areas of the Main Plant Building included in this proposed action are:

> Product Packaging and Handling (PPH) Area; Process Sample Cells (PSC) 1 and 3; Acid Recovery Pump Room (ARPR); Fuel Receiving Pool (FRS) and Cask Unloading Pool (CUP); Fuel Receiving and Storage (FRS) Decon Pit & Stall; Hot Acid Cell (HAC); Ventilation Wash Room (VWR); Acid Recovery Cell (ARC); Upper Warm Aisle (UWA) & Lower Warm Aisle (LWA) pump niches; Tank 5V-1 in the Uranium Load Out (ULO).

As a minimum, decontamination methods to be used may include all of the technologies identified in DOE/EM-0142P Decommissioning Handbook, March,1994, Section 9.0, 'Decontamination'. Some form of decontamination would be used to perform the tasks listed below, such as chemical, mechanical or manual. For example, chemical decontamination may be used for flushing of tanks and piping systems. Mechanical processes such as vacuuming, washing, swabbing, foaming agents, application of latex-peelable coatings, wet/dry abrasive cleaning and grinding of surfaces could be used to remove and/or fix loose contamination.

Dismantlement methods to be used may include all of the technologies identified in DOE/EM-0142P Decommissioning Handbook, March,1994, Section 10, 'Dismantling, Segmenting, and Demolition'. Any dismantlement (e.g., removal of walls, door ways, equipment, etc.) would be limited to providing access routes into an area and/or providing openings for removal of large equipment (e.g. tanks). Dismantling/Segmenting techniques are grouped into three categories: mechanical, thermal, and other. Any one or combination of the following methods, including but not limited to, may be used:

Mechanical

- nibblers and shears
- mechanical saws
- circular saws
- abrasive saws
- wall and floor saws
- diamond wire
- core/stitch drilling

Thermal

- plasma arc
- oxygen burning
- flame cutting
- thermite reaction lance
- arc saw

Other

- abrasive water jet (e.g. water, only; water with grit-like materials such as sand)

Tools such as electric reciprocating saws, portable bandsaws, pipe cutters, and hydraulic shears would be the most preferable because they are lightweight, swift and efficient in operation.

The individual work scopes and the proposed method(s) for each area are discussed below.

I Product Packaging & Handling Area (PPH)

The Product Packaging and Handling (PPH) Area is approximately 10 ft wide, 42 ft long, and 14 ft high and is located east of the extraction cells in the south east corner of the re-processing building, adjacent to the east stairs. Historically the PPH was used to package end products of the reprocessing operation including solutions of plutonium nitrate and uranium nitrate. The PPH is located adjacent to the Waste Reduction and Packaging (WRPA) area and can be accessed through large doors, located at the south end of the Product Packing and Shipping (PPS) area/WRPA area. This accessibility and proximity to the WRPA area could provide a potential staging area for the waste.

The PPH contains removable platforms for accessing a multi-compartment glove box approximately 18' long x 4' wide x 16' high. The glove box is located on a part of the floor whose Plant elevation is 95'-10". Also residing within this area are product storage racks and an overhead monorail.

WORK SCOPE: The objective of this work scope is to decontaminate, dismantle and size reduce the contaminated equipment in the PPH area, including the glove box and its associated ventilation duct and filter. The work scope would also include the abatement and removal of any suspect asbestos found in and around the PPH and glove box.

The glove box in the PPH is expected to be highly contaminated. After the initial decontamination, an encapsulate could be sprayed on the inside of the glove box to fix any remaining loose contamination. The glove box would be dismantled and the pieces size-reduced for designated radioactive waste containers.

II Process Sample Cell (PSC) 1

The Process Sample Cell 1 is a small cell and an airlock that contained a sample glove box station. The cell is located east of the Product Purification Cell (PPC) at the south east corner of the Lower Extraction Aisle (LXA). The cell was used for plutonium "B" Level sampling. PSC-1 was taken out of service, the glove box removed, and the cell painted during the 1980's plant decontamination work for WVDP. The cell is contaminated and closed.

WORK SCOPE: The objective of this work scope is to complete the initial 1980's decontamination of the area . The work scope would also include the abatement and removal of any suspect asbestos found in and around the PSC-1 area.

III Process Sample Cell (PSC) 3

The Process Sample Cell 3 is located in the north east corner of the Off Gas Aisle (OGA) above the Off Gas Cell (OGC). PSC-3 is accessible through an airlock and equipped with a glove box. The glove box was formerly used for sampling the Acid Fractionator Feed Tank and the General Purpose Evaporator, both of which are located in the Acid Recovery Cell (ARC). The glove box can also sample the Vessel Off-Gas Condensate Catch Tank located in the Off Gas Cell (OGC).

WORK SCOPE- PSC-3: The objective of this work scope is to decontaminate PSC-3 in order to remove the glove box and non-operative utility lines. Sample points that are determined to be necessary would be replaced and/or relocated. The work scope would also include the abatement and removal of any suspect asbestos found in and around the PSC-3 area.

The contents of PSC-3 would be cleared and decontaminated which would include dismantling of the air-lock and the block walls, followed by removal and packaging of the glove box waste for shipping and disposal. (**Note:** Removal of the glove box and sample cell walls will significantly enhance future access to the off-gas cell and acid recovery cell.

The inside of the glove box may be wiped down. An encapsulate would be sprayed inside of the glove box to fix any remaining loose contamination. After the glove box is removed from the PSC, the walls, floor, and ceiling of the PSC would be decontaminated as required.

IV Acid Recovery Pump Room (ARPR)

The ARPR is located next to the Off-Gas Blower Room in the lower south west corner of the Main Plant Building. The ARPR housed pumps, a tank and piping that transferred acid streams of various concentrations from the Acid Recovery Cell to various storage vessels in the plant.

The ARPR is constructed of reinforced concrete and is 16 ft wide, 22.83 ft long, and 10 ft high. The walls and floor are 1 ft thick and the ceiling is 1.5 ft thick. The floors, walls, and ceiling were originally coated with carboline-based paint. Due to exposure to acid and acid vapors during the years of operation, this paint is no longer a uniform coating within the room. A floor drain in the center of the cell drains to the interceptor. A pump niche is located in the northeast corner of the cell. The niche is a cube-like structure about 3 feet square, open at the top but with a concrete cover. The niche contains part of a pump; the motor and gear reducer drive for this pump is located just outside of this niche.

The cell was designed to be accessible through a door/opening in the east wall of the cell that connected to the south stairs. The ARPR is ventilated by the main plant ventilation system and receives its airflow from the south stairs. Air flows in sequence to the Acid Recovery Cell, to the Off-Gas Cell, and to the main ventilation plenum, where it passes through roughing and HEPA filters before being discharged through the main stack.

The ARPR contains 1 tank, 5 pumps, and miscellaneous process and utility piping. Recent photos/video show this room also contains miscellaneous debris including three HEPA filters in what appear to be cardboard or plywood boxes, a 5 gallon white pail, one 30 gallon SS drum, one 55 gallon drum, a broom, and loose concrete debris/chips on the floor. There is no stainless steel liner installed to protect the floor.

WORK SCOPE: The objective of the work scope for the ARPR is to remove pumps, piping, tanks, and decontaminate and fix any loose contamination thereby providing future access to other areas of the Main Plant Building where waste will have to be removed (e. g., Acid Recovery Cell). The work scope would also include the abatement and removal of any asbestos found in and around the ARPR area.

Decontamination efforts will encompass removal of contamination from the floor and all upward facing surfaces, including asbestos, and all loose debris from the ARPR. Permanent utilities to the ARPR would be isolated. Liquids in the ARPR process lines would be tell-taled, sampled, analyzed and collected. The process lines would be subsequently isolated to ensure against inadvertent intrusion of additional liquids. The tank, pumps, electrical and instrumentation components, process and utility piping, HEPA filters, and miscellaneous debris would be size reduced as necessary and removed from the ARPR.

Once all materials identified have been removed, the ARPR may have an encapsulating coating applied to the floor, walls, and ceiling as necessary to fix the remaining radioactive contaminants in the room. The final state of the ARPR will be completely empty, i.e., the walls, ceiling, and floor will be free of any equipment and components.

V Fuel Receiving and Storage (FRS) Pool / Cask Unloading Pool (CUP)

The Fuel Receiving and Storage (FRS) area is the plant facility that handled all activities related to the receiving and storage of spent reactor fuel prior to reprocessing or reshipment. The FRS is located in the northeast corner of the Process Building at an elevation 96 feet with the bottom of the pool dropping to elevation 53 feet. The FRS measures 130 feet long, 50 feet wide, and 50 feet high. Construction of the FRS consists of a structural steel siding frame with insulated corrugated steel sandwich panel siding and roofing. The west wall and part of the south wall is concrete block and reinforced concrete. The floor of the FRS is concrete.

The fuel storage pool is 40 feet wide, 75 feet long, and 29 feet deep. The walls and floor are reinforced concrete. The concrete floor of the pool is 3 feet 3 inches thick, and the outside walls are 3 feet 6 inches thick at the base, tapering to 1 foot 6 inches at grade. Above grade, the pool walls are 4 foot high and 1 foot in width. Overhead is a 100-ton bridge crane with two auxiliary 5-ton hooks, and a pair of 2-ton service bridges that travel over the pool for lifting fuel.

The new water treatment system (Submerged Water Filtration System installed in 1994) was designed to maintain pool water purity through mechanical filtration and ion exchange. The mechanical filtration unit is constructed of 304 stainless steel. It has four filter cartridge housings and a center pump housing tube, which acts as the inlet suction plenum to the pump. The pore size of the filters has been selected to optimize water filtration capability while maximizing filter run time. The pump is designed to provide 260 gallons per minute (gpm) continuous service. The ion exchanger has been designed to maintain chemistry and to isotopically decontaminate pool water, and is operated independently of the mechanical filtration unit. A 50 gpm continuous flow pump provides the suction for ion exchange operations. All vessels associated with the new water treatment system are located under water in the fuel storage pool.

There are 11 remaining fuel storage racks, oriented north and south, in the pool and currently are holding 125 spent fuel assemblies in canisters. These spent fuel assemblies are scheduled to be shipped offsite in 2001. The racks consist of an aluminum beam structure. The racks are fastened on the north wall and to the bottom of the pool. There is a 4 foot wide aisle between the south end of the racks and the pool wall to allow movement of the canisters.

The Cask Unloading Pool (CUP) is located at the east end of the fuel storage pool and was used for the removal of the spent fuel assemblies from the shipping casks and their placement in the fuel storage canisters. It is 26 feet long, 24 feet wide, and sectioned to depths of 29 feet (shelf area) and 44 feet. There is a removable gate which serves to isolate the CUP from the fuel storage pool so that the CUP can be drained without draining the pool. A rack on the north wall of the CUP provides for storage of the gate. A canister lift rack and a fuel storage rack are also located in the area.

WORK SCOPE: The objective of this work scope is to perform housekeeping activities after removal and shipment of the spent fuel assemblies by removing debris from the floor of the FRS Pool and CUP, and removing the racks, stands, and miscellaneous structural components in both pools. No water removal from these pools is included in this work scope.

Vacuuming and filtering would be accomplished by an underwater system. Mechanical and thermal cutting systems adapted for underwater use would be utilized to remove equipment racks and equipment in the pool, and place them into containment boxes.

VI FRS Decon Stall and Pit

A cask decontamination area (Decon Stall/Decon Pit) is located at the east end of the fuel storage pool. It is a 14 feet square by 29.5 feet high, curbed stall constructed of aluminum and stainless steel. The stall is equipped with a rolling door and roof to permit the 100-ton crane to position a cask vertically inside. There is an elevator-type platform equipped with a high pressure water spray

ring used for decontamination. The high pressure water system for cask wash down consisted of a diesel driven pump enclosed in a small building adjacent to the east wall of the FRS. Piping and spray nozzles are located in the Decon Stall. Drains are provided to route any decontamination water to the site Low Level Waste Treatment Facility (LLWTF). An eight inch duct at the top of the Decon Stall is used to draw air out of the stall to the Main Plant Ventilation Washer in the Main Plant Building.

WORK SCOPE: The objective of this work scope is to decontaminate and dismantle the Decon Stall and Pit after removal and shipment of the spent fuel assemblies off-site. Both mechanical and thermal cutting systems would be used to dismantle the Decon Stall. The platform, spray rings, piping, high pressure spray pumps and other support equipment will be cut up, sized reduced, segregated and packaged for disposal. Decontamination of the Pit would be accomplished after the removal of the other components. The work scope would also include the abatement and removal of any suspect asbestos found in and around the FRS Decon Stall and Pit.

VII Hot Acid Cell

The Hot Acid Cell (HAC) is on the 4th floor of the Main Plant Building, located on top of the Chemical Process Cell (CPC) sharing its south wall with the Ventilation Exhaust Cell (VEC) and its north wall with the Process Chemical Room (PCR). The floor of the HAC is part of the ceiling of the CPC and is at a plant elevation of 148 ft. The HAC contains two tanks originally used to store the concentrated nitric acid from the bottoms of the acid fractionator feed vaporizer. A pump room located just outside the HAC housed equipment for transferring the recycled nitric acid to the dissolvers in the CPC for use in dissolving nuclear fuel. The HAC tanks have been flushed and are not presently being used.

There is a common 3 inch floor drain on the west side of the pump room and the south east corner of the HAC. The line drains to the General Purpose Evaporator located in the ARC. The horizontal tanks are bolted to and sit on rectangular concrete pedestals integral to the floor. The HAC can be entered through a door way located at the south east end of the cell.

WORK SCOPE: The objective of this work scope is to remove tanks, piping, pump, sample station, and package the waste for disposal. The work scope would also include the abatement and removal of any suspect asbestos found in and around the HAC area.

The entire pump room and the HAC would be vacuumed and wiped down to remove the loose contamination. If there are areas that can not be cleaned effectively, an encapsulate may have to be sprayed on these areas to fix any loose contamination. The components in the HAC would be sampled and all piping and equipment in the pump room would be cut and removed by thermal and/or mechanical means.

Following removal of all pipe and equipment, the HAC would be cleaned again in preparation for removing the tanks from the HAC. (**NOTE:** The block walls west of the Pump Room door, the door itself, and the block walls south of the door to the HAC may have to be removed to provide an access route for removal of the larger components in the HAC). Tank cutting would be completed by mechanical and/or thermal cutting systems.

VIII Ventilation Wash Room

The Ventilation Wash Room (VWR) is a reinforced concrete room with no stainless steel floor liner, located just south of the Process Mechanical Cell (PMC) on the second floor of the Main Plant Building. The VWR contains a washer that was designed to remove particulates from cell exhaust air before it entered the main ventilation exhaust filter plenum. One of the primary functions of the washer was to remove airborne particulates from the saw and shear in the PMC. Chemical fumes from the laboratory hood exhausts were also routed to the VWR. The VWR received and scrubbed exhaust air from 12 areas: a) analytical cells 1 through 5 including the 2C sample cell and the sample storage cell, b) vitrification lab glove boxes and hood, c) hoods (4) the

hot chem lab and hoods (4) the cold lab, d) the Decon Stall in the FRS, e) UPC and niches, f) PPC and niches, g) XC3 and niches, h) XC2 and niches, i) XC1 and niches, j) LWC, k) glove box in the PPH, and l) the exhaust from jet 15H-26.

A 3" floor drain is located in the east side of the VWR and drains to the interceptor. The washer tank (the bottom 18" of the washer which forms a collection tank) has a drain to the PMC. The VWR may be entered through a door at the south east corner of the cell that connects with the lower extraction aisle. The washer is presently out-of-service. Air bypasses the washer and passes from the supply plenum through the 26-in diameter emergency by pass duct to the main ventilation exhaust system plenum.

WORK SCOPE: The objective of this work scope is to remove the Ventilation Washer filters and associated equipment from the Ventilation Wash Room, and prepare the room for potential ventilation needs during final D&D operations. The work scope would also include the abatement and removal of any suspect asbestos found in and around the VWR area.

In order to make use of the VWR during final D&D operations, the washer would have to be initially removed. It is believed that the washer is highly contaminated and is the major source of high radiation levels in the room. The high radiation levels are presumed to be coming mostly from the filter banks that were left in the washer. Residue in the pan below the filters could also be contributing to the radiation source.

The filters are in racks that have a panel attached to the side of the washer with nuts tightened on studs. The number and size of the nuts is unknown at this time but they have to be removed to access the filters. Filling the pan below the filters with water may afford shielding from the radiation coming from the residue in the pan.

Following demolition of the washer, loose contamination on the inside of the washer would be removed or fixed in place. After all of the filters and access panels have been removed, the water would be vacuumed from the pan to a collection tank where it would be sampled and analyzed to determine further disposition (e.g. sent to the LWTS). The remaining washer would be cut and size-reduced for disposal. To support final D&D activities the VWR could be fitted with a vent/filter system that would aid in the ventilation needs for the final D&D projects.

IX Acid Recovery Cell

The Acid Recovery Cell (ARC) is on the second floor of the south west corner of the Main Plant Building. The far south west corner of this cell extends to the third floor to accommodate the 30'-4" tall Acid Fractionator. During original operations, the ARC recovered and concentrated nitric acid for reuse in fuel reprocessing. The system is inactive.

The ARC was accessible from 3 locations: a) a door on the east side of the cell connecting with the south stairs; b) a man-way on the northwest side of the ARC connecting with the Off-Gas Cell; and c) a 3.5 ft diameter hatch in the ceiling that connects with the overlying Off-Gas Aisle. Access to the ARC is projected to be through the south stairs past the ARPR after the decontamination of the ARPR (see above Item III).

The ARC is ventilated by the main ventilation exhaust system and receives its airflow from the south stairs, ARPR, and the Off-Gas Blower Room. Air flows from the ARC to the Off-Gas Cell and then to the main ventilation plenum where it passes through roughing and HEPA filters before being discharged through the main stack.

WORK SCOPE: The objective of this work scope is to remove all equipment and piping including equipment on the roof. The ARC contains 2 vessels, 1 tank, 1 pot, and 4 exchangers and miscellaneous process and utility piping that connects them. Three additional exchangers are located on the roof above the Off-Gas Aisle. The work scope would also include the abatement and removal of any suspect asbestos found in and around the ARC area.

Loose debris would be removed from the floor. Permanent utilities to the ARC will be isolated. Any liquids in the process lines would be tell-taled, collected, sampled, and characterized. The process lines would be subsequently isolated to ensure against inadvertent intrusion of additional liquids. The tank, pumps, electrical and instrumentation components, process and utility piping, HEPA filters, and miscellaneous debris will be size reduced as necessary and removed from the ARC.

Once all materials identified have been removed, the ARC will have an encapsulating coating applied to the floor, walls, and ceiling as necessary to fix the radioactive contaminants remaining in the room in place. The final state of the ARC will be completely empty, i.e., the walls, ceiling, and floor will be free of any equipment and components.

X Upper & Lower Warm Aisle Pump Niches

The Lower Warm Aisle (LWA) is located on the first floor of the Main Plant Building adjacent to the south walls of the extraction cells at a plant elevation of 100 ft. The LWA contains nine shielded concrete niches that house pumps and valves that formerly supported nuclear fuel reprocessing operations in the adjacent extraction cells and PPC. One of the niches adjacent to XC-3 is currently being used to support operation of the LWTS. The niches are ventilated into, and have liquid drains into, the adjacent shielded cells.

The niches are 4 ft high and are 7 ft wide, extending 6 to 10 ft into the LWA from the wall separating the LWA from the extraction cells. The pump niches were used to support nuclear fuel reprocessing operations in the extraction cells and the PPC. Pumps inside the niches provided specialized functions, including transferring uranium and plutonium product streams between the extraction cells and the PPC, transferring aqueous waste streams containing fission products from the extraction cells to the LWC, and supplying TBP/n-dodecane to the extraction cells. Nitric acid, ferrous sulfamate, TBP/n-dodecane, sodium bicarbonate and, in 1971 during a test in XC-2, hydrazine, would have been present in these solutions.

The Upper Warm Aisle (UWA) is located south of the extraction cells and is 90' long, 16' wide, and is 18'6" high. The upper warm aisle contains six shielded concrete niches that house pumps and valves that were part of the reprocessing operations in the adjacent extraction cells. Three of the niches are next to XC-2, two are next to XC-3, and one is next to both XC-2 and XC-3. Two of the six pump niches house Liquid Waste Treatment System equipment. The niches are ventilated into, and have liquid drains into, the adjacent shielded cells.

The UWA can be entered through a stairwell at its northwestern end or through an airlock from the lower extraction aisle (LXA) at its eastern end. Equipment can be moved into and out of the UWA at its eastern end through a 3 ft. x 5 ft. hatch that connects with the lower warm aisle.

WORK SCOPE of LWA and UWA: The objective of this work scope is to remove the pumps and piping from the LWA and the UWA niches; plug the drains to the cells; and decontaminate the area. Decontamination of the LWA and the UWA niches provide potential future access for remote inspections and surveys into the heavily contaminated adjacent extraction cells. The work scope would also include the abatement and removal of any suspect asbestos found in and around the LWA and UWA area.

A containment tent would be erected to enclose the niches for radiological considerations. An encapsulate may be sprayed into the niches to fix any loose contamination. The covers would be removed from the niches. The piping would be cut, packaged for disposal, and the pumps removed. Following decontamination of the pump niches, the tent(s) would be dismantled and the remainder of the aisles decontaminated as necessary.

4.0 SCHEDULE AND TIMING

Decontamination activities are projected to begin **November 13, 2000.**

SECTION B SOURCES OF IMPACT

1. **Air Emissions** - The control of loose activity from becoming airborne and the control and reduction of dose to the workers will be key in working in the proposed plant areas. Negative air pressure on the rooms, cells, areas, is drawn by the main vent system. If additional air flow is needed a HEPA ventilation system may be incorporated into the operation. Containment enclosures used could be ventilated with one of the site's portable ventilation units (PVUs). Tents would be ventilated using one of the permitted portable ventilation units (PVUs) (NESHAP Permit # WVDP-587-01). The PVU would be operated in accordance with EMP-300, "Routine WVDP Stack Air Effluent Monitoring and Sampling."[1]

   Radionuclides emissions would be ventilated through the Main Process Building Ventilation System. Any potential radionuclide emissions for these decontamination operations would be evaluated in accordance with 40 CFR Part 61, Subpart H. With respect to stack monitoring, a pre-operational evaluation of the proposed decontamination work for each area would be performed to determine the types and quantities of radioactive airborne emissions expected from the facility as specified in DOE/EH-0173T, "Environmental Regulatory Guide for Radiological Effluent Monitoring and Environmental Surveillance."

   Additionally, torch or plasma arc cutting may be used resulting in emissions which will be reviewed by Environmental Affairs to ensure compliance with the WVDP's New York State Facility Air Permit. If chemical flushes of piping and tanks occur, the resulting air emissions would also be reviewed by Environmental Affairs.

2. **Liquid Effluents** - Demineralized water could be used to decontaminate the surfaces. It is estimated that approximately 1 gallon of contaminated waste water would be generated for every 10 ft^2 of surface area decontaminated. Cooling wastewater from cooling mechanical equipment may also be generated. Less than 0.2 million gallons per year of process and cooling wastewater would be generated. The wastewater would be characterized in accordance with SOP 300-07, "On-Site waste Generation, Packaging and Transportation." Waste streams deemed acceptable would be transferred to the interceptor for processing through the Low Level Liquid Waste Treatment System. Chemicals could also be added to the demineralized water to facilitate decontamination (See below, Section B #7, Chemical Use/Storage).

3. **Solid Waste: N/A**

4. **Radioactive Waste** - Given the locations and nature of the proposed action, radioactive waste is expected. Both LLW, GTCC, and TRU, could be generated from, but not limited to, piping, valves, equipment, vessels, pumps, racks, condensers, glove boxes, and debris. Since many areas are sealed rooms and entry has not been made into many of these areas since the re-processing operations ceased in the 1970's, actual quantities can not be accurately estimated. The following are some broad estimates based on process knowledge, engineering drawings, closure engineering reports, and the PBS-02 work scopes for each area:

[1] All procedures identified henceforth in this checklist refer to the most recent revisions; procedures reference in this document are applicable at the time of approval; equivalent procedures may be developed or modified for future operations described herein.

XI Tank 5V-1

The Uranium Load out (ULO) and the Uranium Product Cell (UPC) are the two interconnected facilities which form the Product Handling Area (PHA). The ULO is located east of the UPC in the south east corner of the main Plant Building and contains Tank 5V-1, a 5,000 gallon stainless steel, low-enriched uranium product weigh tank.

During fuel reprocessing the ULO was used to measure and load shipments of uranyl nitrate solution into tanker trucks for shipment. Uranyl nitrate solution from the UPC was transferred to Tank 5V-1 via the two pumps in the ULO niche. One of the pumps serviced the low-enriched uranium off-specification tank in the UPC, transferring off-specification uranyl nitrate solution to the extraction cells for recycling. The other pump transferred uranyl nitrate solution from the low-enriched uranium storage tank (5D15B) in the UPC to tank 5V-1 in the ULO, where the weight of the solution was measured and then transferred by pressurized air to a tanker truck. The ULO was decontaminated between July 1985 and February 1986 to prepare this cell for the LWTS. Inclusive of this effort were numerous water flushes of Tank 5V-1.

WORK SCOPE: The flushed material was solidified in the cement solidification system. The objective of this work scope is to decontaminate and remove the tank, the weigh scale and the tank support structure for disposal. The work scope would also include the abatement and removal of any suspect asbestos found in and around the tank and tank area.

Due to the height of this tank, scaffolding would be required to accomplish the downsizing. An airlock would be established inside or outside of the room to control airborne contamination while the tank is being cut up. All piping entering and or exiting the tank and electrical systems would be cut and size reduced for packaging using both mechanical and/or thermal cutting methods. A general wipe down of the area may be performed prior to completion of work.

3.0 PURPOSE AND NEED

The **purpose** of the proposed action described in this checklist is to initiate transition decontamination activities in the Main Plant Building to advance the goal of completion of the WVDP Act and those final decontamination activities which will be evaluated in the planned de-scoped EIS.

The **need** is for DOE to demonstrate definitive progress on its Act responsibilities. The WVDP has reached a crucial turning point in the work that is required to be completed under the Act. Undertaking the transition decontamination activities described in this checklist demonstrates that progress by :

-Removing concentrated long-lived radioisotopes and reducing the levels of surveillance and monitoring;

-Taking advantage of near-term waste disposal opportunities available at other DOE facilities under the Waste Management Programmatic Environmental Impact Statement Record of Decision (DOE/EIS-0200-F);

-Defining, estimating, and planning for work to support annual congressional funding requests;

-Maximizing the use of the knowledge base and experience level of the existing work force.

PPH - approximately 400 cu.ft. of Low Level Waste[2] (LLW) (possibly TRU) consisting of piping, valves, the glove box, debris.

PSC-1 - This area was deactivated and all equipment removed. Radioactive waste generated is expected to be asbestos, wipes and anti-C clothing.

PSC-3 - approximately 200 cu. ft of LLW consisting of the glove box and associated equipment.

ARPR - approximately 226 cu. ft of LLW consisting of equipment, vessels, pumps, condenser and piping; approximately 180 cu. ft. of TRU could be generated.

CUP, FRS Pool, and Decon Stall and Pit - approximately 3400 cu. ft of LLW consisting of debris (possibly TRU) and racks and 125 cu. ft. LLW of piping

HAC - approximately 836 cu. ft. of LLW (possibly TRU) equipment, piping and valves.

VWR - approximately 374 cu. ft. of LLW (possibly TRU) piping, equipment and filter media

ARC - approximately 600 cu. ft of LLW (possibly TRU) equipment and piping

UWA and LWA - approximately 678 cu. ft of LLW (possibly TRU) equipment, piping, liners & valves

Tank 5V-1 - approximately 164 cu. ft of LLW (possibly TRU) tank pieces, valves, and piping.

Additional radioactive waste generated would include asbestos insulation/debris, anti-Cs; gloves, wipes, swipes, air filters, and equipment and tooling. Radioactive waste generated as a result of the proposed decontamination activities would be packaged and stored in accordance with SOP 9-2, "Solid Radioactive Waste Handling," and SOP 9-21, "Lag Storage Operations."

5. **Hazardous Waste** - The potential exists that hazardous waste could be generated from the use of equipment (e.g., batteries) used in size reduction, decontamination techniques, etc. Any hazardous waste generated would be handled according to SOP -300-07, "On-Site Waste Generation, Packaging and Transportation" and SOP 300-06, "Hazardous Waste Storage Operations."

6. **Mixed Waste** - Based on the PBS-02 work scopes for each of the areas, the potential exists that residual chemical wastes could be contained in the contaminated tanks, piping, drains, and systems. These wastes include, but are not limited to: nitric acid residues (HAC; ARC); perchloric acid residues (possible in VWR duct work); uranyl nitrate (Tank 5V-1). Chemically contaminated components would be characterized and dispositioned according to SOP 300-07, "On-Site Waste Generation, Packaging and Transportation," Mixed low level radioactive waste would be characterized and stored in accordance with SOP 300-09, "Interim Waste Storage Facility Operation" or SOP-9-21, "Lag Operations." Any mixed waste that would be generated would be addressed in the FFCAct Site Treatment Plan (WVDP-299).

[2] Includes Class A, B, and C

7. **Chemical Use/Storage** - Demineralized water would be used in the decontamination methods, however, chemicals could be added to the demineralized water to facilitate decontamination. Additionally, fixatives could be applied to stabilize loose contamination. Chemicals used would be as specified and approved in the NYSDEC State Pollutant Discharge Elimination System (SPDES) permit for the WVDP (NY-0000973).

8. **Petroleum Storage/Use: N/A**

9. **Asbestos:** Asbestos is suspected to exist in the : PPH Glove Box; ARPR insulation and valve packings; FRS Decon Pit/Stall piping and/or valve packings; VWR piping and valve packings; ARC; UWA & LWA Pump Nitches; Tank 5V-1 in the ULO piping. The asbestos would be abated in accordance with 12 NYCRR Part 56, "Asbestos," as amended November 9, 1994, and approved site specific variances; 29 CFR 1926.1101, "Asbestos;" 6 CFR 61, Subparts A & M, "National Emission Standards for Hazardous Air Pollutants".

   Additionally, WVNS holds a New York State Department of Labor (NYSDOL) Asbestos Contractors license for asbestos activities performed by WVNS personnel. All WVNS personnel who perform asbestos related activities must hold current NYS Department of Health certified training for the specific class of work to be completed. This training requires an annual refresher. All asbestos workers and engineers must also have a valid NYSDOL asbestos handlers certification.

10. **Utilities** -Prior to dismantling or segmenting of any component, all utilities to the component (e.g., sources of water, electric power, steam) must be disconnected to ensure the safety of personnel involved. Electrical and instrumentation components, process and piping utilities and piping will be cut, isolated and/or removed where present. Ventilation systems would remain intact until final decontamination and decommissioning decisions are made in future NEPA documents (i.e., de-scoped EIS).

11. **Clearing of Excavation: N/A**

12. **Water Use/Diversion:** Demineralized water would be used to decontaminate the surfaces. Approximately 1 gallon of demineralized water/wash solution may be used for every 10 ft^2 of surface area decontaminated (AIF/NESP-036). Additionally, process cooling wastewater would be used in the operation of saws and other cutting equipment.

13. **Water Treatment:** Decontamination water would be collected in collection tanks and sampled. Based on the sampling results, the wastewater would be treated using existing site treatment systems (e.g., the Liquid Waste Treatment System or Low-Level Waste Treatment Facility). Wastewater would be disposed in accordance with NYSDEC SPDES permit requirements.

14. **Water Course Modification: N/A**

15. **Radiation/Toxic Chemical Exposures:** Radiation dose rates could range from <1 mrem/hr (e.g. PPH) - 5000 mrem/hr (e.g. VWR, west side of washer; ARC tanks). Individual exposures would depend on the duration of decontamination operations and the proximity to and handling of equipment, tank, piping, etc. All exposures would be ALARA and in compliance with applicable State and Federal regulations and DOE Orders as implemented by WVDP-010, "Radiological Controls Manual.", WVDP-011, "Industrial Hygiene and Safety Manual," SOP 15-14, "Entry Into and Exit From Contaminated Areas," and SOP 0-43, "Personnel Access to High and Very High Radiation Areas." The individual dose to workers would not exceed the administrative control limits of 100 mrem/year.

16. **Pesticide/Herbicide Use: N/A**

17. **High Energy Source/Explosive: N/A**

18. **Transportation:** Radiation levels for all repackaged waste would be within applicable DOT limits (49 CFR Parts 173 and 177). Waste containers would be transported on-site in accordance with SOP 300-07, "On-Site Waste Generation, Packaging and Transportation." Before any radioactive waste container could be transported off-site, it would have to meet the packaging requirements for radioactive materials set forth in 49 CFR Part 173, "Subpart I - Radioactive Materials," and 10 CFR Part 71, "Packaging and Transport of Radioactive Material."

Additionally hazardous and mixed waste shipments would have to meet the manifesting requirements set forth in 40 CFR part 262, "Standards Applicable to Generators of Hazardous Waste" (and 6NYCRR 372, "Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities." All waste shipments would be in accordance with the requirements for shipments specified in 49 CFR Part 100 - 177, "Transportation," and 6 NYCRR Part 381, "Transporters of Low-Level Radioactive Waste.

19. **Noise Level: N/A**

20. **Workforce Adjustment: N/A**

21. **Other: N/A**

SECTION C CATEGORY EVALUATION CRITERIA

1. **Take place in an area of previous or on-going disturbance?**

The proposed action would take place in a facility of previous disturbance. Certain areas of the Main Plant Building underwent some early decontamination effort in the 1980's in preparation for solidification activities. Additionally, some decontamination work has been on-going in the Head End Cells.

2. **Create hazardous, radioactive, or mixed waste for which no disposal is available?**

Class B/C and TRU waste could be generated. Currently there is no commercial TRU-waste disposal facility. Federal disposal capacity is available for TRU waste at DOE's Waste Isolation Pilot Plant (WIPP). At this time, however, the WIPP Land Withdrawal Act specifies that only TRU waste generated by defense activities may be disposed of at WIPP, thus precluding any WVDP TRU waste.

Class B/C waste could be disposed of at the DOE Nevada Test Site or Hanford under the Waste Management Programmatic Environmental Impact Statement Record of Decision (DOE/EIS-0200-F). Alternatively, Class B/C waste could be shipped to a commercial facility, such as Barnwell (see Section C, Item 4). Regardless, issues with the Stipulation of Compromise would have to resolved.

3. **Impact a RCRA regulated unit or facility?**

The WVDP Resource Conservation Recovery Act (RCRA) Facility Investigation (RFI) report that was developed to meet the RCRA 3008 (h) Administrative Order-on-Consent requirements (i.e., WVDP-RFI-016, "Sealed Rooms Paper Characterization") identified the UWA, ARC, ARPR, HAC, and the VWR as Solid Waste Management Units (SWMUs). If these rooms contain radioactive mixed wastes, they would be handled in accordance with the provisions of the Consent Order, SOP 300-09, SOP-300-07, and WVDP-299 (see Section B, Sources of Impact , # 6; and Section D).

4. **Force a low income or ethnic minority population to shoulder a disproportionate share of negative environmental impacts, etc.?** No. Environmental justice considerations conclude that proposed action will not have a negative bearing on ethnic or minority groups within the WVDP area.

5. **Involve air emissions and be located in an air- pollutant non-attainment or maintenance area, etc.?** No. The WVDP is not located in a non-attainment area.

6. **Require any federal, state or local permits, approvals, notifications, etc.**

The proposed decontamination activities will not threaten a violation of applicable statutory, regulatory, or permit requirements. Any permits or notifications that could be required are discussed below.

a) NESHAPS - Radioactive emissions are regulated in New York State by the U.S. Environmental Protection Agency (EPA) pursuant to 40 CFR 61, "National Emission Standards for Hazardous Air Pollutants" (NESHAP), Subpart H. Subpart H requires facilities to evaluate the potential radionuclide emissions to air from any proposed activity to determine NESHAP permit and stack monitoring requirements. Accordingly, NESHAP permit requirements would be determined for the proposed decontamination work. A dose and risk assessment would be performed for these activities using CAP88-PC (Clean Air Assessment Package - 1988) to determine NESHAP permit and stack monitoring requirements.

b) SPDES - -The most recent SPDES permit application, filed in September 2000, identified decontamination wastewater, including spent demineralized water and/or nitric acid solution, as a source to outfall 001 (i.e., LLWTF-Lagoon 3) at an average flow rate of 0.7 +/- 0.4 million gallons per year (MGY). Cooling wastewater is also identified on the most recently filed SPDES permit application at outfall 001 at an average rate of 0.1 +/- 0.05 MGY.

A SPDES permit application and NYSDEC approval for the use of any water treatment chemicals, which are not already approved or listed on the most current WVDP SPDES permit, may also be necessary.

c) RCRA -The New York State Department of Environmental Conservation (NYSDEC) requested (Letter, DW:2000:132, dated February 16, 2000) that DOE provide NYSDEC a status report on any future investigations of the sealed rooms. As such, status reports and/or updates for the sealed rooms would be provided to NYSDEC.

d) Asbestos Notifications -WVNS must submit asbestos project notifications to EPA NESHAPS and NYSDOL when the amount of asbestos to be removed is greater than 260 linear feet or 160 square feet. Notifications must be submitted at least 10 working days prior to the start of the project. If delay of the project occurs after the submittals of the notifications are made, amended notifications with the new start date must be submitted prior to the original start date. The final air monitoring clearance results to NYSDOL must also submitted.

Exemptions-Any commercial disposal of Class B/C or GTCC waste would require DOE approval of an exemption from the requirements of DOE Order 435.1, "Radioactive Waste Management." Additionally separate NEPA documentation would have to be developed for the commercial off-site disposal of Class B/C and/or GTCC waste.

7. **Disturb hazardous substances, pollutants or contaminants that pre-exist in the environment, such that there would be uncontrolled or unpermitted releases?** No.

8. **Require siting, construction, or major expansion of a waste storage, disposal, recovery, or treatment facilities, etc.?** No

9. **Adversely affect environmentally sensitive resources, etc.?** No. See discussion, Section D.

10. **Involve extraordinary circumstances?** No.

11. **Be "connected" to other actions with potential significant impacts, etc.** No. See discussion, Section D.

SECTION D RECOMMENDATION AND APPROVAL

A Categorical Exclusion (CX) is recommended for the proposed action. A CX should be granted on the basis that the proposed action is within the scope of Title 10, Code of Federal Regulations (CFR) 1021, as amended, Subpart D, Appendix B, CX B 6.1, "Small-scale, short-term clean-up actions, under RCRA, Atomic Energy Act, or other authorities, less than approximately 5 million dollars in cost, and 5 years duration, to reduce the risk to human health or the environment from the release or threat of release of a hazardous substance (other than high-level radioactive waste or spent nuclear fuel), including but not limited to treatment, recovery, storage disposal of wastes at existing facilities handling the type of wastes involved in the action." Two statutory authorities provide the justification for conducting the proposed action under this categorical exclusion.

First, the WVDP Act requires the DOE to decontaminate and decommission any material, hardware, and facilities used in connection with the Project. As such, initiating these transition decontamination activities would not prejudice the results of the on-going DEIS (DOE/EIS 0226-D) or proposed de-scoped EIS because the proposed action does not depend on any on-going or proposed NEPA documents for its justification. Moreover, these decontamination transition activities are consistent with the proposed range of alternatives under consideration by the DOE in the proposed de-scoped EIS, yet to be drafted.

Second, the RCRA 3008 (h) Administrative Order-on-Consent, required that the DOE and the New York State Energy Research Development Agency (NYSERDA) perform a RCRA Facility Investigation (RFI) to determine whether RCRA-defined hazardous wastes or hazardous constituents had been released to the environment from Solid Waste Management Units (SWMUs) at the WVDP. The RFI included a detailed historical review (WVDP-RFI-016) of sealed rooms Sealed rooms identified in the Main Plant Building as SWMUs in WVDP-RFI-016 included the UWA Pump Nitches, the HAC, VWR, ARPR, and ARC.

The New York State Department of Environmental Conservation (NYSDEC) and the U.S. Environmental Protection Agency (EPA) evaluated the data from the RFI report and concluded in 1998 that the sealed rooms identified in WVDP-RFI-016 do not appear to presently pose a significant threat from the release of hazardous waste or hazardous constituents to the outside environment. However, decontamination activities in the sealed rooms will provide information on the presence of mixed waste and associated future actions that may have to be performed relative to managing RCRA waste which may be present. Should radioactive mixed wastes and/or hazardous waste be identified in the sealed rooms during the decontamination activities, they would be managed in accordance with the provisions of the Consent Order (see Section B, Sources of Impact, # 6; and Section C, Category Evaluation Criteria, #3).

With respect to the on-going DEIS and the proposed de-scoped EIS, proceeding with these decontamination activities would not bias or preclude DOE from implementing any of the alternatives under consideration in these NEPA documents. The scopes of work herein, the waste volumes, costs and duration are insignificant in comparison to the waste volumes, costs and duration for the range of alternatives in the existing DEIS or those being proposed in the de-scoped EIS. Also, the proposed action would not trigger other actions that would require an EIS, and the proposed action can take place without other actions taking place previously or simultaneously.

Further, the proposed action meets the conditions of a categorical exclusion. There are no extraordinary circumstances related to the proposed action that would affect the significance of the action, and the action is not "connected" to other actions with potentially or cumulatively significant impacts (40 CFR 1508.25(a)(1) and (2), respectively). Moreover, the proposed action meets the eligibility criteria for application of categorical exclusion B 6.1 in that the action would not: 1) threaten a violation of applicable statutory, regulatory or permits requirements for environmental, safety, and health, including all requirements from DOE Orders; 2) require siting and construction or major action of waste storage, disposal, recovery, or treatment facilities; and 3) adversely affect environmentally sensitive resources; and 4) disturb hazardous substances, pollutants, contaminants or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases.

SUPPORTING DOCUMENTATION

AIF/NESP-036	T.S. LaGuardia et al. TLG Engineering, Inc., for the Atomic Industrial Forum, "Guidelines for Producing Commercial Nuclear Power Plant Decommissioning Cost Estimates," dated 1986
CAP88-PC	U. S. Department of Energy, "Clean Air Assessment Package," dated June 1997
10 CFR Part 71	U. S. Department of Energy, "Packaging and Transport of Radioactive Material," dated January 13, 1998
10 CFR 1021	U. S. Department of Energy, "National Environmental Policy Act Implementing Procedures; Final Rule," dated July 9, 1996
29 CFR 1926.1101	U. S. Occupational Safely and Health Administration, "Toxic and Hazardous Substances," Subpart Z, dated June 29, 1995
40 CFR 61	U. S. Environmental Protection Agency, "National Emission Standards for Hazardous Air Pollutants" (NESHAP), Subparts A, H, and M," dated July 1, 1998
40 CFR 262	U. S. Environmental Protection Agency, "Standards Applicable to Generators of Hazardous Wastes," Subpart B, dated July1, 1998
40 CFR 1500 - 1508	U.S. Council on Environmental Quality, "Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act," dated July 1, 1996
49 CFR 100 - 177	U. S. Department of Transportation, "Transportation," dated October 1, 1992
DOE/EH-0173T	"Environmental Regulatory Guide for Radiological Effluent Monitoring and Environmental Surveillance."
DOE/EIS-0081	U. S. Department of Energy, "Final Environmental Impact Statement: Long-Term Management of Liquid High-Level Radioactive Wastes Stored at the Western New York Nuclear Services Center, West Valley," dated June 1982
DOE/EIS-0226-D	U.S. Department of Energy,"Completion of the West Valley Demonstration Project and Closure or Long-Term Management of Facilities at the Western New York Nuclear Services Center," dated March 1996
DOE/EIS-0200-F	U. S. Department of Energy, " Final Waste Management Programmatic Environmental impact Statement, for Managing Treatment, Storage, and Disposal of Radioactive and Hazardous Waste," dated May 1997
DOE/EM-0142P	U. S. Department of Energy, "Decommissioning Handbook", dated March 1994
DOE Order 435.1	U. S. Department of Energy, "Radioactive Waste Management," dated July 9, 1999

DOE Order 451.1	U.S. Department of Energy, "National Environmental Policy Act Compliance Program," dated September 11, 1995
DW:2000:0132	M. N. Maloney to R. R. Campbell, "January 31, 2000 Meeting - U. S. Department of Energy and New York State Department of Environmental Conservation," dated February 16, 2000
EMP-300	West Valley Demonstration Project, "Routine WVDP Stack Air Effluent Monitoring and Sampling," dated September 15, 1999
63 FR 3625	U. S. Department of Energy, "Record of Decision for the Department of Energy's Waste isolation Pilot Plant Disposal Phase," dated January 23, 1998
NY-0000973	New York State Department of Environmental Conservation, "State Pollutant Discharge Elimination System (SPDES) Discharge Permit for the West Valley Demonstration Project," as modified, dated February 1, 1994
6 NYCRR Parts 370-376	New York State Department of Environmental Conservation, "Chapter IV - Quality Services, Subchapter B - Solid Wastes," dated May 14, 1985
6 NYCRR Part 381	New York State Department of Environmental Conservation, "Transporters of Low-Level Radioactive Waste," dated August 16, 1998
12 NYCRR Part 56	New York State Department of Labor, "Asbestos," as amended November 9, 1994
Public Law 96-368	U. S. Congress, West Valley Demonstration Project (S.2443), dated October 1, 1980
RCRA 3008(h)	U. S. Department of Energy & New York State Energy Research and Development Authority, "Administrative Order of Consent," dated March 1992
SOP 0-43	West Valley Nuclear Services Company, "Personnel Access to High and Very High Radiation Areas," Revision 1, dated August 27, 19998.
SOP 9-2	West Valley Nuclear Services Company, "Solid Radioactive Waste Handling," Revision 6, dated March 2, 1992
SOP 9-21	West Valley Nuclear Services Company, "Lag Storage Operations," Revision 5, dated March 31, 2000
SOP 15-14	West Valley Nuclear Services Company, "Entry Into and Exit from Contaminated Areas," Revision 13, dated December 28, 1993
SOP 300-06	West Valley Nuclear Services Company, "Hazardous Waste Storage Operations," Revision 7, dated August 1, 2000
SOP 300-07	West Valley Nuclear Services Company, "On-Site Waste Generation, Packaging and Transportation," Revision 12, dated August 4, 2000

SOP 300-09	West Valley Nuclear Services Company, "Interim Waste Storage Facility Operation," Revision 6, dated June30, 2000
SOP 300-11	West Valley Nuclear Services Company, "Off-Site Transportation of Industrial Waste," Revision 6, dated June 30, 1998
SOP OH-6.1.01	Ohio Field Office, "National Environmental policy Act Compliance," Revision 1, dated July 7, 1995
WVDP-010	West Valley Demonstration Project, "Radiological Controls Manual," Revision 11, dated April 14, 1994
WVDP-011,	West Valley Demonstration Project, "Industrial Hygiene and Safety Manual, " Revision 13, dated September 1, 1994
WVDP-072	West Valley Demonstration Project, "Asbestos Management Plan," Revision 5, dated October 26, 1999
WVDP -299	West Valley Demonstration Project, "Site Treatment Plan, Fiscal Year 1999 Update," dated February 2000
WVDP-EIS-011	West Valley Demonstration Project, "Process Building Waste Characterization Report," Revision 1, dated September 29, 1995
WVDP-EIS-018	West Valley Demonstration Project, "Process Building Closure Engineering Report," Revision 1, dated September 28, 1995
WVDP-RFI-016	"Sealed Rooms Paper Characterization, " Revision 1, dated June 6, 1994